



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2405

SEP 10 1991

Ref: 8HWM-FF

Mr. Frazer Lockhart  
U.S. Department of Energy  
Rocky Flats Plant  
P.O. Box 928  
Golden, CO 80402

Dear Mr. Lockhart:

EPA has reviewed the Background Geochemical Characterization Report for 1989. Our specific comments are enclosed (Enclosure 1) along with comments from the Colorado Department of Health (Enclosure 2). Also enclosed is a detailed analysis of the report by our statistician (Enclosure 3). This analysis identifies a number of major concerns regarding statistical treatment of the data and is intended as a basis for discussion regarding improvements to the background program. By the language contained in Section X of Attachment 2 to the Interagency Agreement, it is our understanding that the Background Study is an ongoing effort and that updated reports will be submitted by DOE at least annually.

Our comments identify a number of serious concerns with the 1989 report which must be addressed before the results contained in this report are used in subsequent RCRA Facility Investigation/Remedial Investigation Reports. For example, we are concerned that the division of Rocky Flats into North and South Rocky Flats for the statistical analyses in the report may not be appropriate for the lower groundwater system. Also, due to what appears to be inadequate QA/QC and data validation practices, the background analyses for radionuclides is not acceptable. Other concerns pertain to the statistical treatment and the representativeness of the data. These concerns are so fundamental to the entire background program that we suggest not resubmitting the 1989 report, but rather, concentrating on addressing these comments in the 1990 annual report. This will require that corrections be made in the comparative statistics calculations and that consideration be given to additional sampling sites.

We suggest that DOE, EG&G, CDH and EPA representatives meet soon to discuss the enclosed comments and to develop a plan and a schedule for ensuring that the necessary changes are made to the background program which will result in a technically defensible definition of background levels. We propose that these discussions also include an update by DOE on the status of the ongoing geologic characterization program as this program is referred to a number of times in the document as being an

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integral part of the understanding of background conditions for groundwater.

Until the concerns of EPA and CDH are addressed satisfactorily, documents submitted in accordance with the Interagency Agreement cannot contain conclusions based on the results of the Background Geochemical Characterization Report.

If you have any questions about the enclosed comments or wish to schedule a review conference, please contact Ms. Bonita Lavelle at (303) 294-1067.

Sincerely,



Martin Hestmark, Manager  
Rocky Flats Project

cc: Gary Baughman, CDH  
Barbara Barry, CDH  
Tom Greengard, EG&G